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8 T/M 12 NOVEMBER 2021

# Welkom

## Intelligent Asset Management: Innovaties die staan!

Johan Amsing, Solution Architect – Ideo & Rohan Patel, CEO - AsInt



# Intelligent Asset Management

## Innovaties die staan!!



**Rohan Patel**  
CEO ASInt

rohan.patel@asint.net  
713-553-8971



**Johan Amsing**  
Solution architect

Johan.Amsing@ideo-nl.com  
+31 (0)6 58 81 02 02





# SAP Intelligent Asset Management

## Asset Strategy And Performance Management

- ✓ Determine maintenance strategy
- ✓ Analyze failure modes and causes using RCM/FMECA methods
- ✓ Optimize maintenance plans

## Mobile Asset Management

- ✓ Processing work orders online/offline
- ✓ Improve availability and asset lifecycle through faster work processes
- ✓ Less paper

## AsInt's Mechanical Integrity in SAP Intelligent Asset Management (IAM) suite

- ✓ Removing data silos and disconnected work processes
- ✓ Co-Innovated, Certified and endorsed by SAP
- ✓ Embed MI functions in SAP AIN and ASPM

## Asset Central

- ✓ Real-time asset information
- ✓ Connected assets
- ✓ Collaboration
- ✓ Single source

## SAP S/4HANA

- ✓ Planning & scheduling of maintenance activities
- ✓ Integrated documentation



## Asset Health Prediction and optimization

- ✓ Predictive maintenance
- ✓ Collect and analyse sensor data
- ✓ Predict failure modes in time
- ✓ Improve asset performance

## Asset Network and Collaboration

- ✓ Share asset information
- ✓ Improve data quality
- ✓ Reduce data maintenance
- ✓ Increase asset availability

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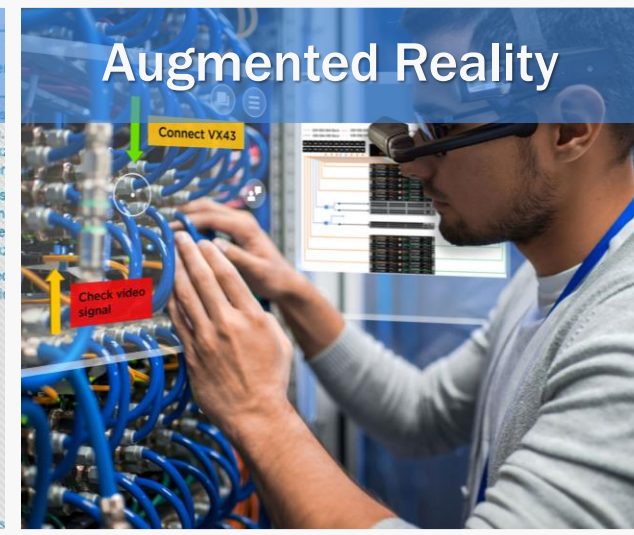
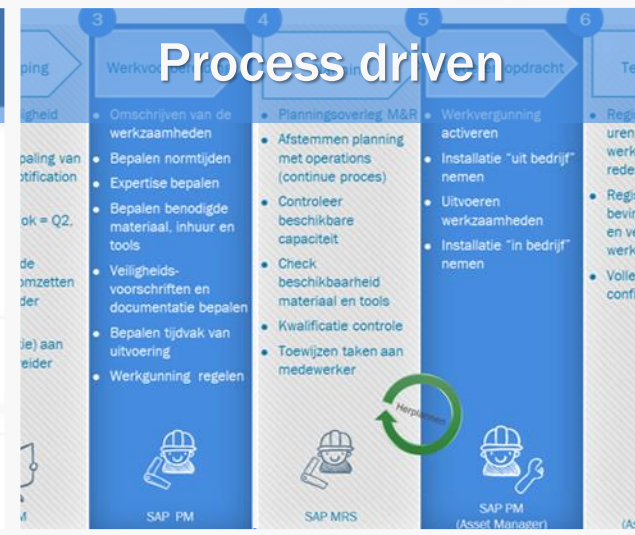
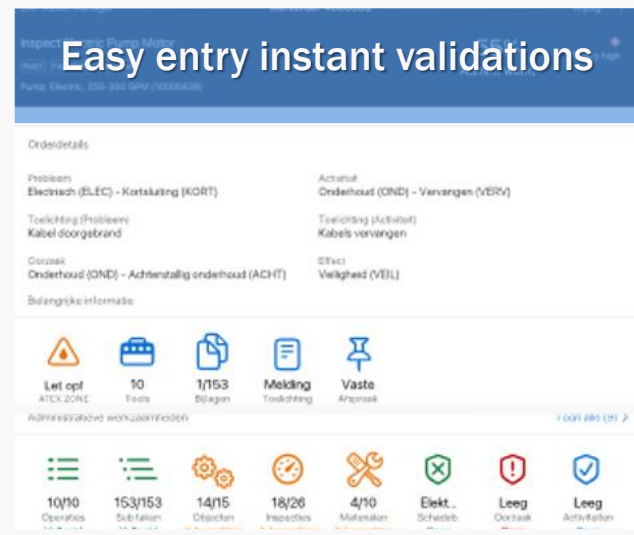
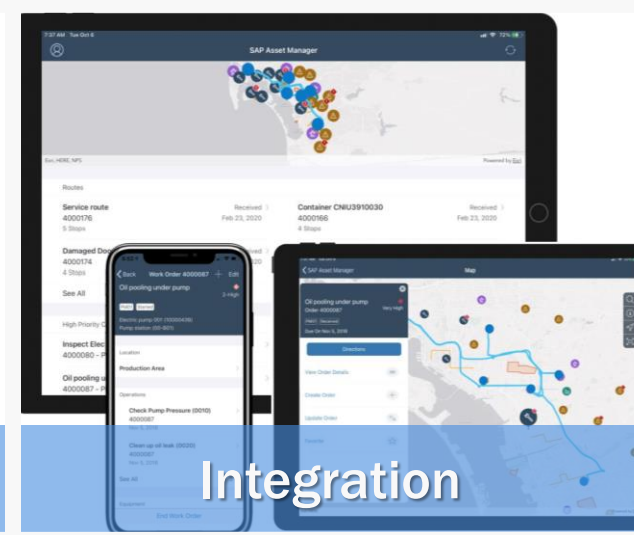
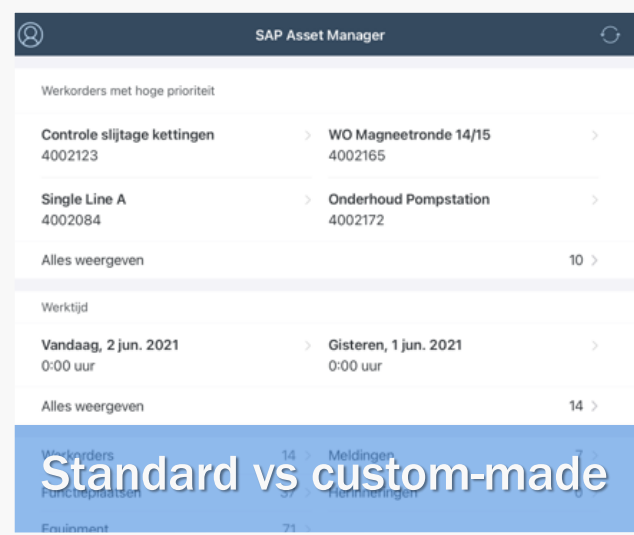


## Asset Health Prediction and optimization

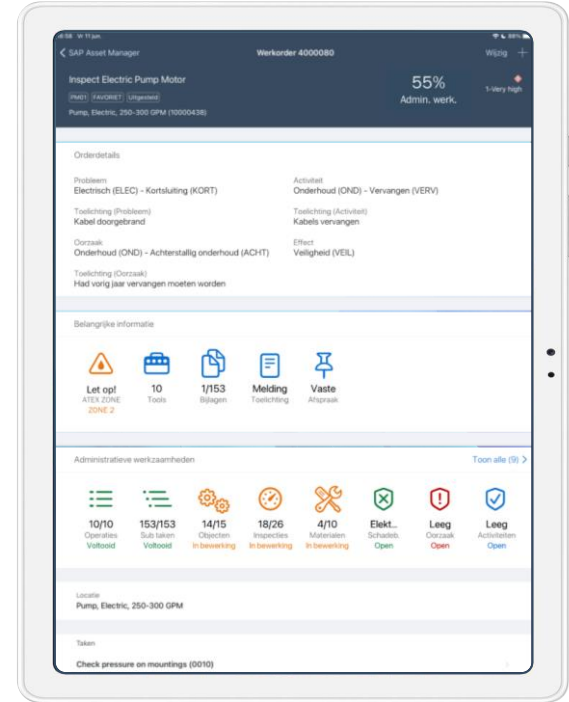
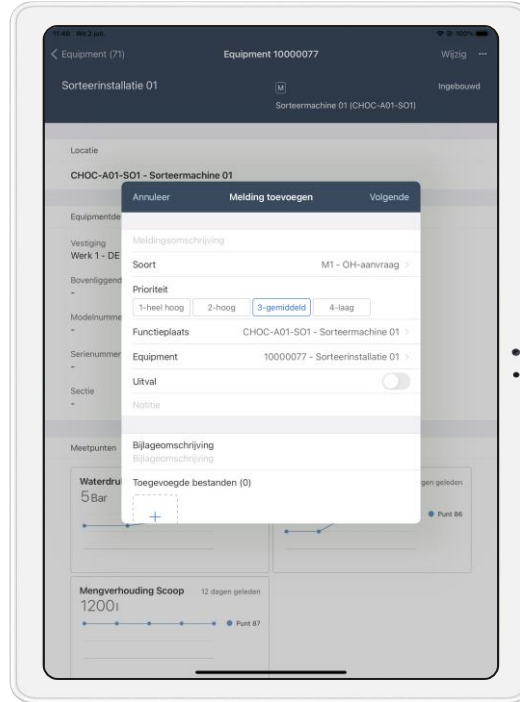
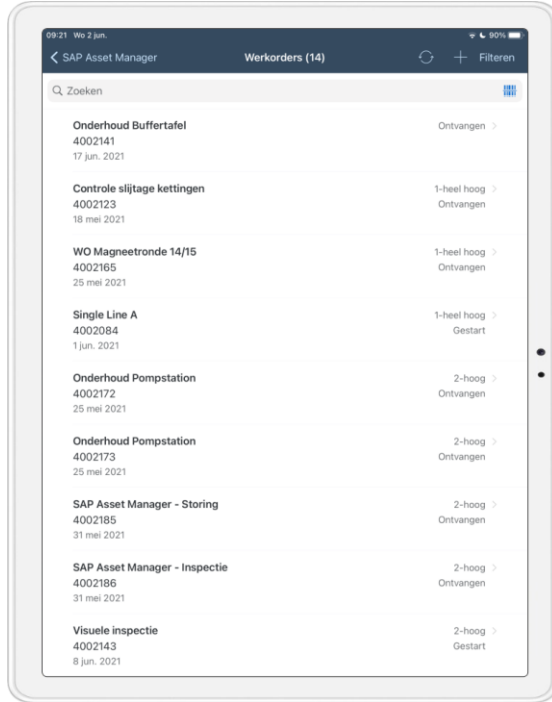
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- ✓ Collect and analyse sensordata
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# SAP Asset Manager



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IoT



Asset Central



Condition monitoring

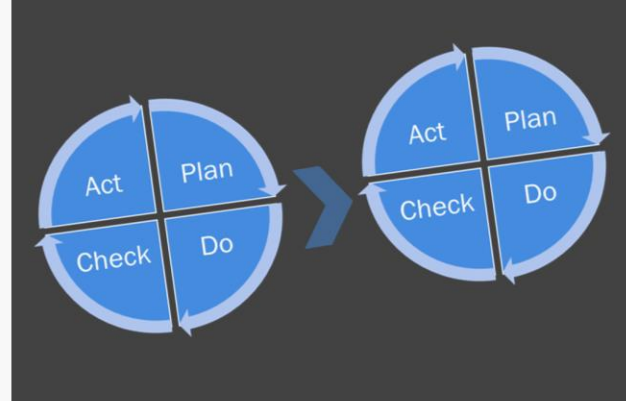
## Failure mode analysis

DOCUMENTATION ▾ MONITORING ▾ MAINTENANCE & SERVICE ▾ ASSESSMENT ▾ ANALYTICS ▾ TIMELINE

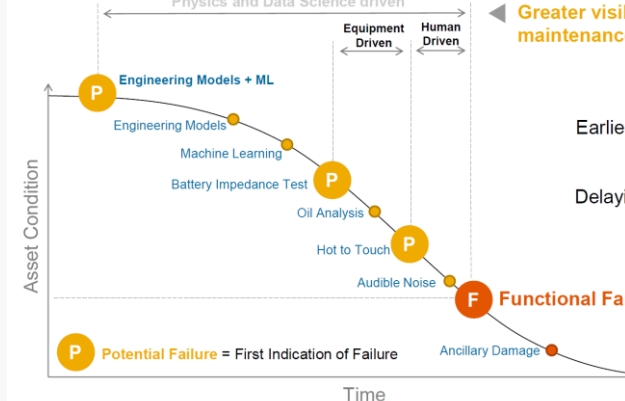
Jun 12: 1

Machine does not start	Motor overload protection...	Motor overload protection...	
PM-IDEO.2	PM-IDEO.5	PM-IDEO.6	F
Occurs in Notifications	Occurs in Notifications	Occurs in Notifications	Oc
0	0	0	Nc
Times	Times	Times	Tr
↓ 100%	↓ 100%	↓ 100%	
Less Than Average	Less Than Average	Less Than Average	
MTTR	N/A	MTTR	N/A
MTTF	N/A	MTTF	N/A
MTBF	N/A	MTBF	N/A
<a href="#">View Analytics</a>	<a href="#">View Analytics</a>	<a href="#">View Analytics</a>	

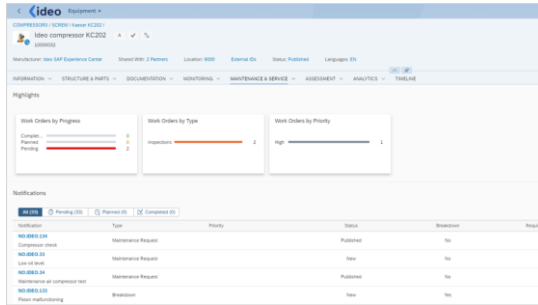
## Plan-Do-Check-Act



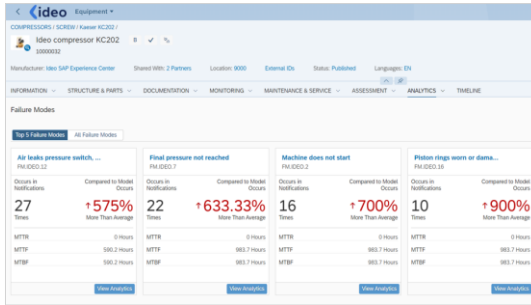
## Predictive maintenance



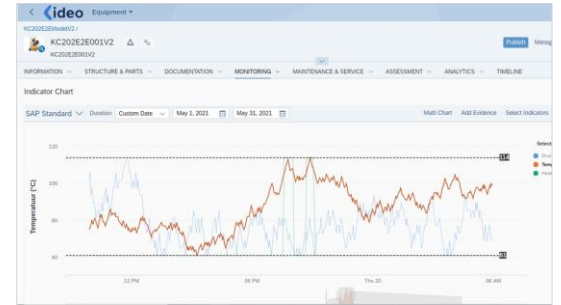
# Predictive Asset Insights



ERP integration



Failure mode analysis



Condition monitoring



# Ideo compressor KC202

10000032

A ✓ 🔊

Manufacturer: [Ideo SAP Experience Center](#)

Shared With: [2 Partners](#)

Location: [9000](#)

[External IDs](#)

Status: [Published](#)

Languages: [EN](#)



INFORMATION ▾   STRUCTURE & PARTS ▾   DOCUMENTATION ▾   MONITORING ▾   MAINTENANCE & SERVICE ▾   ASSESSMENT ▾   ANALYTICS ▾   TIMELINE

## Highlights

### Work Orders by Progress



### Work Orders by Type



### Work Orders by Priority



## Notifications

All (33)   Pending (33)   Planned (0)   Completed (0)

Notification	Type	Priority	Status	Breakdown	Require
<a href="#">NO.IDEO.134</a> Compressor check	Maintenance Request		Published	No	
<a href="#">NO.IDEO.33</a> Low oil level	Maintenance Request		New	No	
<a href="#">NO.IDEO.34</a> Maintenance air compressor test	Maintenance Request		Published	No	
<a href="#">NO.IDEO.133</a> Piston malfunctioning	Breakdown		New	Yes	



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- [ANALYTICS](#) ▾
- [TIMELINE](#)

## Failure Modes

**Top 5 Failure Modes** | [All Failure Modes](#)

### Air leaks pressure switch, ...

FM.IDEO.12

Occurs in Notifications	Compared to Model Occurs
<b>27</b> Times	<b>↑ 575%</b> More Than Average

MTTR	0 Hours
MTTF	590.2 Hours
MTBF	590.2 Hours

[View Analytics](#)

### Final pressure not reached

FM.IDEO.7

Occurs in Notifications	Compared to Model Occurs
<b>22</b> Times	<b>↑ 633.33%</b> More Than Average

MTTR	0 Hours
MTTF	983.7 Hours
MTBF	983.7 Hours

[View Analytics](#)

### Machine does not start

FM.IDEO.2

Occurs in Notifications	Compared to Model Occurs
<b>16</b> Times	<b>↑ 700%</b> More Than Average

MTTR	0 Hours
MTTF	983.7 Hours
MTBF	983.7 Hours

[View Analytics](#)

### Piston rings worn or dama...

FM.IDEO.16

Occurs in Notifications	Compared to Model Occurs
<b>10</b> Times	<b>↑ 900%</b> More Than Average

MTTR	0 Hours
MTTF	983.7 Hours
MTBF	983.7 Hours

[View Analytics](#)



KC202E2E001V2



KC202E2E001V2

Publish

Manag

- INFORMATION ▾
- STRUCTURE & PARTS ▾
- DOCUMENTATION ▾
- MONITORING ▾**
- MAINTENANCE & SERVICE ▾
- ASSESSMENT ▾
- ANALYTICS ▾
- TIMELINE

### Indicator Chart

SAP Standard ▾

Duration

Custom Date ▾

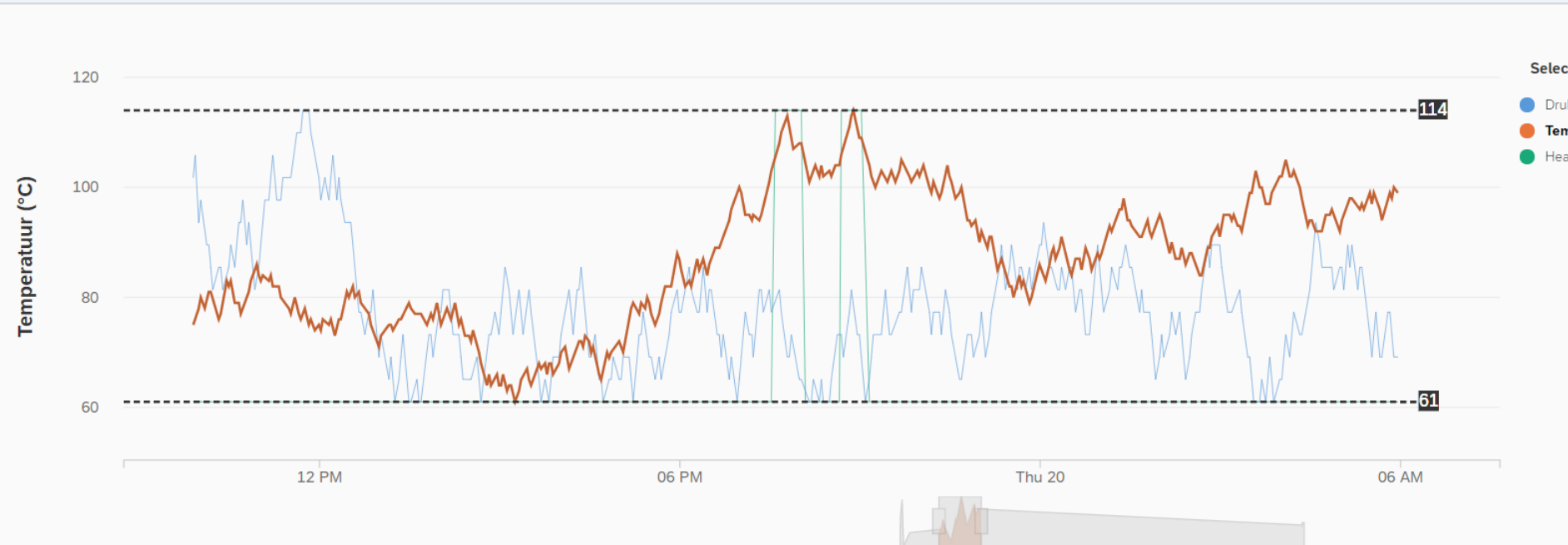
May 1, 2021

May 31, 2021

Multi Chart

Add Evidence

Select Indicators



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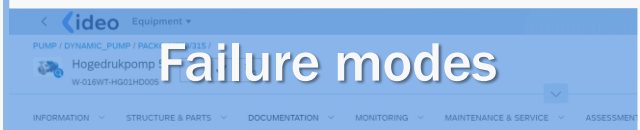
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# RCM & FMEA

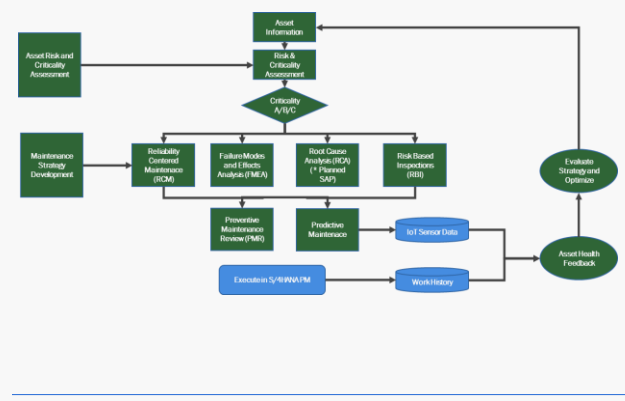
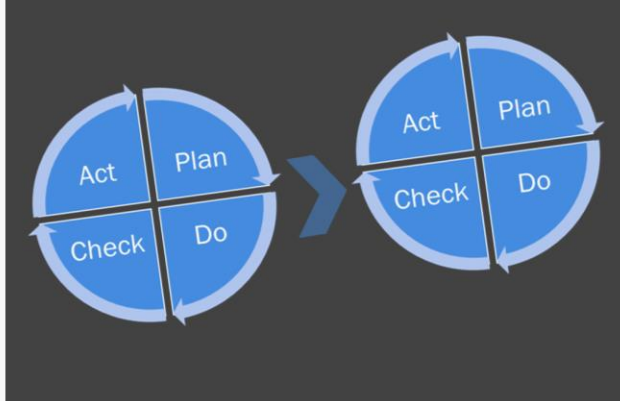


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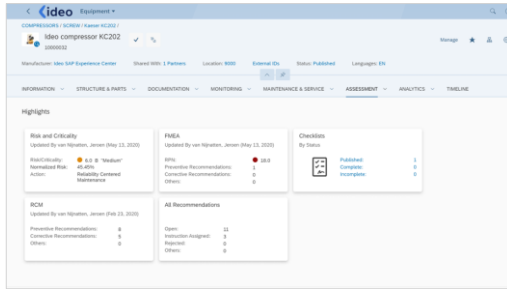
Failure Modes

All (22) | Relevant (22) | Not Relevant (0)

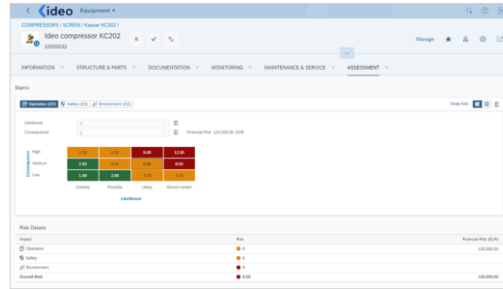
Failure mode	Category	Detection Methods	Types	Effects
<input type="checkbox"/> External surfaces dirty FM.DCS.37	No immediate effect		Non critical failures	
<input type="checkbox"/> Does not look acceptable FM.DCS.36	No immediate effect		Non critical failures	
<input type="checkbox"/> Filter element collapsed FM.DCS.35	Other		Designed Function is not obtained	
<input type="checkbox"/> Filter element missing FM.DCS.34	Other		Specified function lost or outside accepted operational limit	
<input type="checkbox"/> Major water leak FM.DCS.33	External leakage process medium		Specified function lost or outside accepted operational limit	
<input type="checkbox"/> Inlet valve V1 jammed FM.DCS.32	Other		Designed Function is not obtained	
<input type="checkbox"/> Ultrasonic level system fails FM.DCS.31	Specified function lost or outside accepted operational limit		Specified function lost or outside accepted operational limit	
<input type="checkbox"/> Vapour handling system leaks FM.DCS.30	Internal leakage		Designed Function is not obtained	



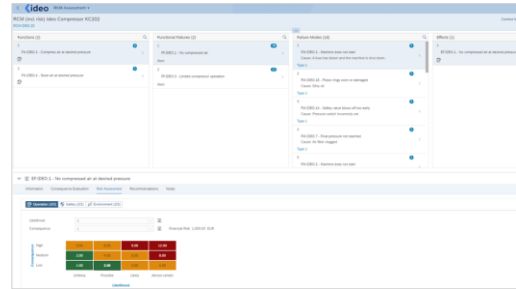
# Asset Strategy and Performance Management



Assessments



Risk & Criticality



RCM assessment





# Ideo compressor KC202

10000032



Manage ★ 📦 ⚙️

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- INFORMATION ▾
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- MAINTENANCE & SERVICE ▾
- ASSESSMENT ▾**
- ANALYTICS ▾
- TIMELINE

## Highlights

### Risk and Criticality

Updated By van Nijnatten, Jeroen (May 13, 2020)

Risk/Criticality: ● 6.0 B "Medium"

Normalized Risk: 45.45%

Action: Reliability Centered Maintenance

### FMEA

Updated By van Nijnatten, Jeroen (May 13, 2020)

RPN: ● 18.0

Preventive Recommendations: 1

Corrective Recommendations: 0

Others: 0

### Checklists

By Status



**Published:** 1

**Complete:** 0

**Incomplete:** 0

### RCM

Updated By van Nijnatten, Jeroen (Feb 23, 2020)

Preventive Recommendations: 8

Corrective Recommendations: 5

Others: 0

### All Recommendations

Open: 11

Instruction Assigned: 3

Rejected: 0

Others: 0



Ideo compressor KC202

10000032

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- INFORMATION ▾ STRUCTURE & PARTS ▾ DOCUMENTATION ▾ MONITORING ▾ MAINTENANCE & SERVICE ▾ ASSESSMENT ▾

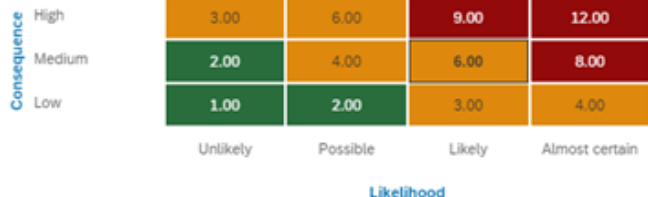
Matrix

📄 Operation (2/2) 📄 Safety (2/2) 📄 Environment (2/2)

Swap Axis 📄 📄 📄

Likelihood  ⓘ

Consequence  ⓘ Financial Risk 120,000.00 EUR



Risk Details

Impact	Risk	Financial Risk (EUR)
📄 Operation	● 6	120,000.00
📄 Safety	● 6	
📄 Environment	● 9	
<b>Overall Risk</b>	● 8.00	120,000.00

Functions (2)

- 1 FN.IDEO.2 - Compress air at desired pressure 2
- 2 FN.IDEO.4 - Store air at desired pressure 1

Functional Failures (2)

- 1 FF.IDEO.1 - No compressed air 18  
Alert
- 2 FF.IDEO.3 - Limited compressor operation 17  
Alert

Failure Modes (18)

- 1 FM.IDEO.2 - Machine does not start 1  
Cause: A fuse has blown and the machine is shut down.  
Type 1
- 2 FM.IDEO.16 - Piston rings worn or damaged 1  
Cause: Dirty oil  
Type 1
- 3 FM.IDEO.14 - Safety valve blows off too early 1  
Cause: Pressure switch incorrectly set  
Type 1
- 4 FM.IDEO.7 - Final pressure not reached 1  
Cause: Air filter clogged  
Type 1
- 5 FM.IDEO.2 - Machine does not start 1

Effects (1)

- 1 EF.IDEO.1 - No compressed air at desired pressure

EF.IDEO.1 - No compressed air at desired pressure

Operation (2/2)   Safety (2/2)   Environment (2/2)

Likelihood:  1  
 Consequence:  1   Financial Risk 1,000.00 EUR

Consequence	High	3.00	6.00	9.00	12.00
	Medium	2.00	4.00	6.00	8.00
	Low	1.00	2.00	3.00	4.00
		Unlikely	Possible	Likely	Almost certain

Likelihood

# Strategic Partnership Ideo & AsInt

“To deliver more options to the SAP Intelligent Asset Management Suite”

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- +20 years expert in software development in the field of Asset Management and Risk-Based Management
- In Co-innovation with SAP certified Risk Based Inspection solution to expand the current SAP IAM solution



- +20 years expert in SAP service and asset management processes
- A SAP ASPM package solution for a rapid implementation of the solution, the Risk Based Inspection solution of AsInt is part of this package

# Can I perform Mechanical Integrity functionality such as **RBI, Inspections, Thickness Monitoring** in SAP Intelligence Asset Management?

AsInt's [RBI \(Risk-Based Inspection Apps\)](#) and [IDMS \(Inspection Data Management System Apps\)](#) extend the current ASPM code-based. Most of the codebase and functionality (non-functional and functional) have been implemented within mature organizations in various continents worldwide. These ensure the core building blocks, such as Asset Management, Templates, Master Data, Internationalization and Localization, Plant Maintenance Integration, etc., are sound

## Key Highlight of the solution:

- Performing these functions within the SAP ecosystem ensures all data needed to manage the swiss cheese model is consolidated within the SAP Master Data
- Remove multiple asset registries
- Connecting the dots for tactical and strategic decisions
- Removing data silos and disconnected work processes
- Co-Innovated, Certified and endorsed by SAP
- Embed MI functions in SAP AIN and ASPM

Asset central foundation is the technology foundation for content, processes, and integration supporting **SAP Asset Intelligence Network (AIN)**, **SAP Predictive Asset Insight (PAI)**, and **SAP Asset Strategy and Performance Management (ASPM)**. Customers get this as part of their SAP Asset Intelligence Network, SAP Predictive Asset Insight, and/or SAP Asset Strategy and Performance Management licensing.

## Outcomes

- *Simplified with market standard technology, data, and processes*
- *Mechanical Integrity functions become native Apps within SAP Asset Intelligence Network*
- *Risk-Based, Time-based, Condition-Based decision making is now EAM functionality*
- *Single Asset Registry & Single Sign On*
- *Removes duplicate data*
- *Improved employee experience and productivity*
- *Maximized ROI*



AsInt, Inc.  
Houston, Texas  
[www.asint.net](http://www.asint.net)

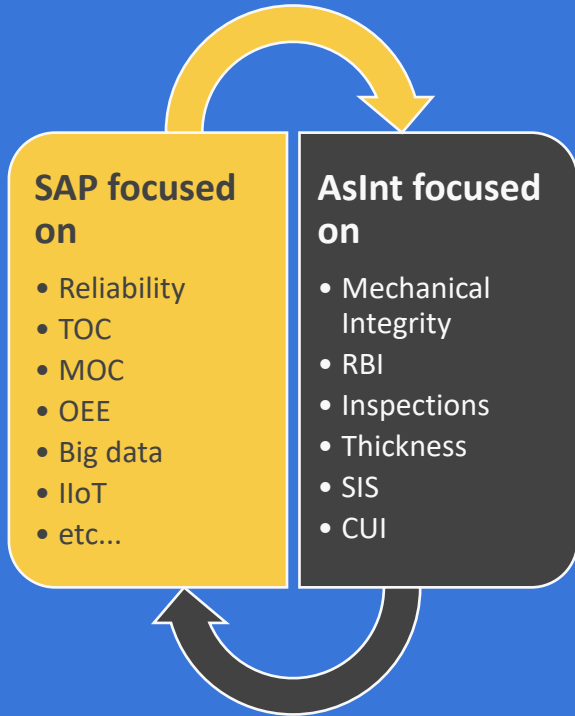
## Industry

- Oil and Gas / Petrochemical
- Semiconductor
- Dairy / Packaging

## Featured Solutions

- RBI (Risk-Based Inspection Apps)
- IDMS (Inspection Data Management Apps)





- ✓ *Embed MI functions in SAP AIN and ASPM*
- ✓ *Performing these functions within the SAP ecosystem ensures all data needed to manage the swiss cheese model is consolidated within the SAP Master Data*
- ✓ *Remove multiple asset registries*
- ✓ *Connecting the dots for tactical and strategic decisions*
- ✓ *Removing data silos and disconnected work processes*
- ✓ *Co-Innovated with SAP*
- ✓ *Endorsed by SAP*

**SAP Home** | Analytic | Administration | Processes | Master Data | Asset Intelligence | Asset Intelligence Configuration

**Master Data**

Equipment	Equipment Search	Models	Functional Locations	Locations	Functions	Failure Modes	Spare Parts	Groups	Systems
10.6 x		95	1	62	3	71	104	16	98

**Documents**

Announcements	Instructions	Templates	Assessment Templates
327	100	445	881
			269

**Asset Intelligence**

Asset Planning	Asset Strategy Development	CML Distribution	Safety Instrumented System	Mech Screener	Asset Inspection
136	1.6 x				952

**Asset Intelligence Configuration**

CML Template	Inspection Templates	Configuration	Assessment Templates	Content Replicator
92	131		214	

**SAP** | Stories | AssetAPM | ...

Summary | RBI | Damage Analysis | Inspection Data | Visual Inspection | Overview Corrective Or... | Critical Equipment | WO Approval/Break-In | Proactive/Reactive

**Risk Category**

All  
 HIGH  
 LOW  
 MEDIUM  
 MEDIUM-HIGH

**External\_Damage\_Ins...**

All  
 A  
 E

**Risk Category**

**Cracking Mechanisms**

**Top 10 by COF**

COF	Total_Risk_As_RBI_Data
002-E-0018	179,001.77
002-H-00003	92,370.44
002-H-00002	38,518.71
002-H-001	37,883.99
002-H-002	33,007.09
002-H-0016	32,998.24
001-E-1808	30,387.38
001-E-1800	30,340.87
001-E-000020	24,795.54
001-E-000018	23,967.01
002-H-002	2,338.98
002-H-00003	1,109.57
001-H-00003	302.58
002-H-0016	243.44
002-E-185	181.48
001-H-0002	52.02
001-E-205	48.63
001-E-1804	45.20
001-F-101	37.71
001-E-00104	32.13

**Date of Last Inspection**

**CUI Carbon & Low Alloy Steels**

Deployed within the SAP Fiori launchpad for seamless use with the SAP Intelligent Asset Management (IAM) suite

Empowering Faster Decisions and Improving data quality through transparency

Developing a foundation for Artificial Intelligence

**SAP** | Equipment | Hexane Flush | A-345

Location: CATALYST SYSTEM | External IDs | Status: In Revision | Language: EN\_DE

INFORMATION | STRUCTURE & PARTS | DOCUMENTATION | MONITORING | MAINTENANCE & SERVICE | ASSESSMENT | TIME

**ASSET STRATEGY**

History | Template

Assessment	Template Type	Analysis Status
CL.RBI.10685	Vessel API 581 3rd r2	Unpublished
Test RBI 0508 1		
CL.RBI.10660	Vessel API 581 3rd r2	Unpublished
A-345		
CL.RBI.10658	Vessel API 581 3rd r2	Unpublished
Test RBI 30-07-2021 1		
CL.RBI.10652	Vessel API 581 3rd r2	Unpublished
A-345		
CL.RBI.10649	Vessel API 581 3rd r2	Unpublished
Mass Run		

More [5 / 257]

**ASSET INSPECTION**

History | Template

**SAP** | Asset Strategy Development | Test RBI 0508 1 | CL.RBI.10685

Template Type: Vessel API 581 3rd r2 | Equipment: A-345 Hexane Flush | Location: CATALYST SYSTEM | System: Hydrocarbon Draft

ANALYSIS DETAILS | RISK MATRIX | MAINTENANCE & SERVICE

**General**

**Inputs**

Component Type:	PUMP25	Material Code:	ASME VIII - Div 1
Geometry Type:	Cylinder	Material Code Year:	1999
Design Pressure:	15 Bar	Material Spec:	SA3105
Design Temperature:	59 Degrees Celsius	Material Grade:	...
Operating Pressure:	0 Bar	Weld Joint Efficiency:	1
Operating Temperature:	42 Degrees Celsius	Yield Strength Override:	2061
Length:	9.144 Meter	Tensile Strength Override:	3785
Diameter:	2479.675 Millimeter	Allowable Stress Override:	923

**Outputs**

Yield Strength: 2061 Bar | Tensile Strength: 3785

Planning

**SAP** | Asset Strategy Development | Test RBI 0508 1 | CL.RBI.10685

Template Type: Vessel API 581 3rd r2 | Equipment: A-345 Hexane Flush | Location: CATALYST SYSTEM | System: Hydrocarbon Draft

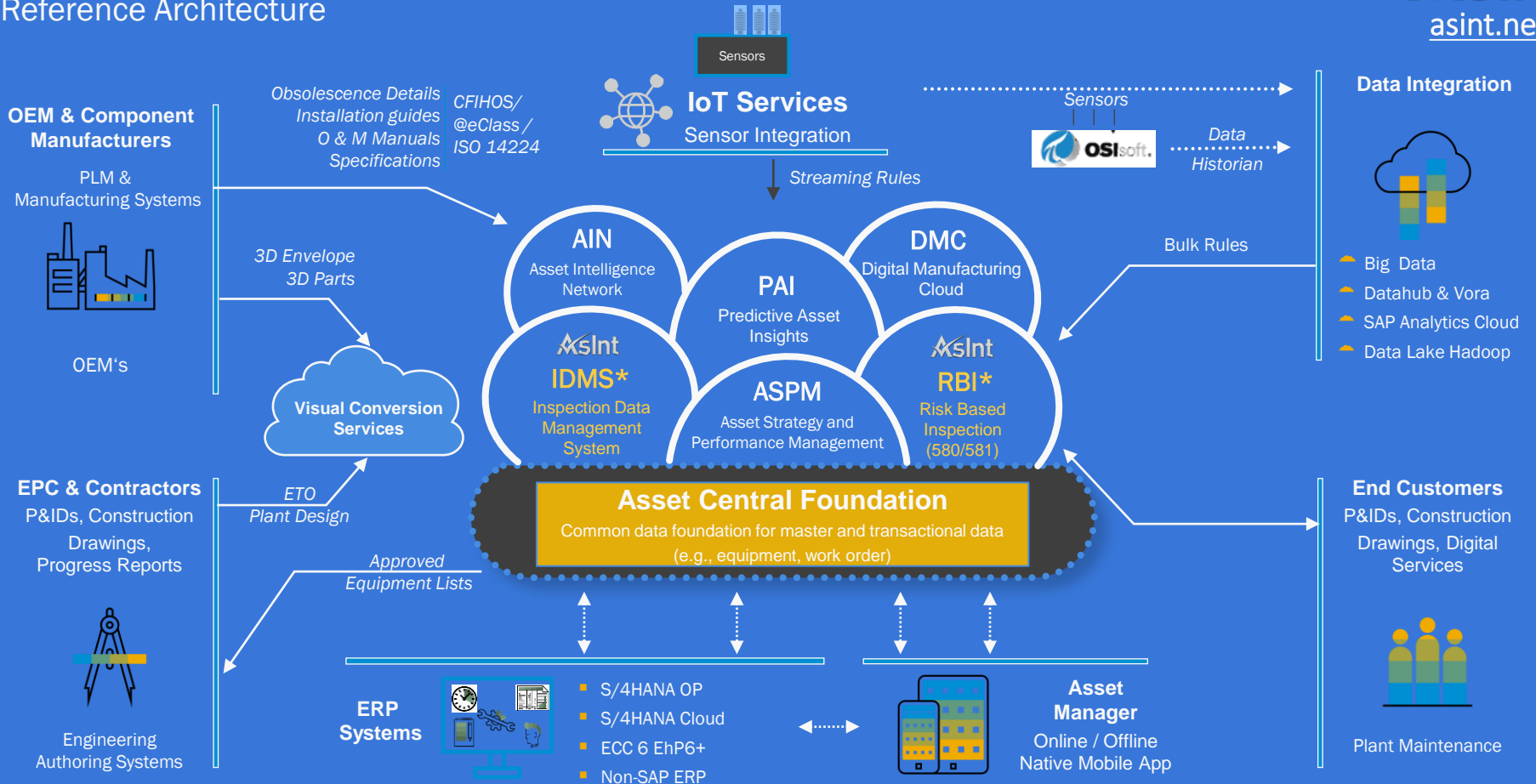
ANALYSIS DETAILS | RISK MATRIX | MAINTENANCE & SERVICE

**Damage Factor : POF Category**

• Damage Factor: RBI Data = 496, Poin Code = 776  
 • Thinning: Damage Poin Code = 75, Component Do  
 • Cracking: Damage RBI Data = 710, Poin Code = 97

**Affected Area : COF Category**

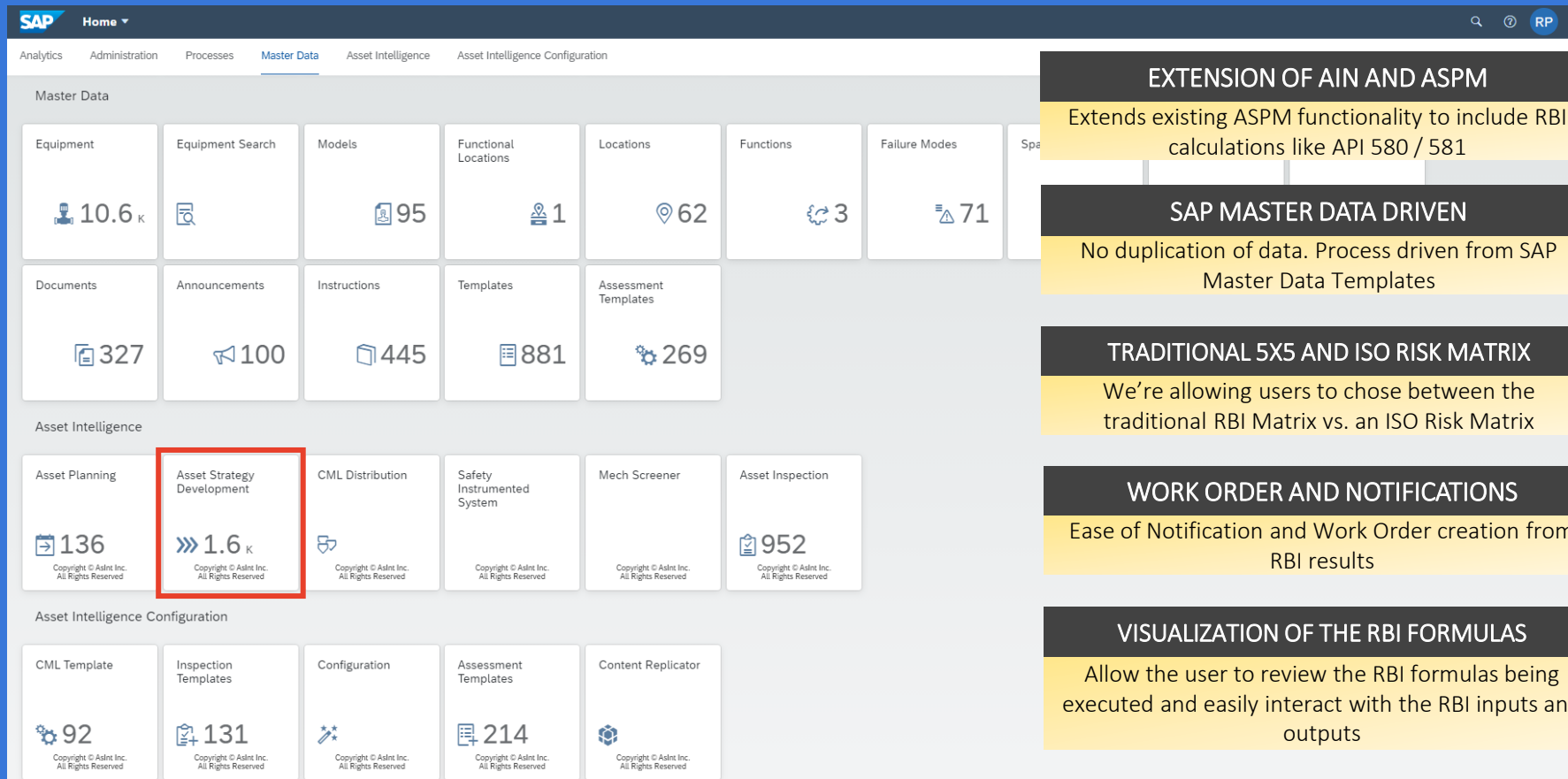
# SAP Intelligent Asset Management (IAM) / Asset Performance Management (APM) Reference Architecture





# Risk based Inspection (RBI)

Industry accepted Risk Based Inspection models (calculators) embedded within SAP. Certified and Co-Innovation with SAP.



The screenshot displays the SAP S/4HANA Asset Intelligence Configuration interface. The top navigation bar includes 'SAP Home' and search icons. The main content is divided into three sections: Master Data, Asset Intelligence, and Asset Intelligence Configuration. The Master Data section contains cards for Equipment (10.6k), Equipment Search, Models (95), Functional Locations (1), Locations (62), Functions (3), and Failure Modes (71). The Asset Intelligence section contains cards for Asset Planning (136), Asset Strategy Development (1.6k, highlighted with a red box), CML Distribution, Safety Instrumented System, Mech Screener, and Asset Inspection (952). The Asset Intelligence Configuration section contains cards for CML Template (92), Inspection Templates (131), Configuration, Assessment Templates (214), and Content Replicator.

## EXTENSION OF AIN AND ASPM

Extends existing ASPM functionality to include RBI calculations like API 580 / 581

## SAP MASTER DATA DRIVEN

No duplication of data. Process driven from SAP Master Data Templates

## TRADITIONAL 5X5 AND ISO RISK MATRIX

We're allowing users to choose between the traditional RBI Matrix vs. an ISO Risk Matrix

## WORK ORDER AND NOTIFICATIONS

Ease of Notification and Work Order creation from RBI results

## VISUALIZATION OF THE RBI FORMULAS

Allow the user to review the RBI formulas being executed and easily interact with the RBI inputs and outputs

Location: CATALYST SYSTEM

External IDs

Status: In Revision

Languages: EN,DE



INFORMATION

STRUCTURE & PARTS

DOCUMENTATION

MONITORING

MAINTENANCE & SERVICE

ASSESSMENT

TIMELINE

**ASSET INTELLIGENCE**

CML

OVERALL READING

ASSET STRATEGY

**History**

Template

Assessment	Template Type	Analysis Status	Created On
<a href="#">CL.RBI.10685</a> Test RBI 0508 1	Vessel API 581 3rd r2	Unpublished	Aug 4, 2021
<a href="#">CL.RBI.10660</a> A-345	Vessel API 581 3rd r2	Unpublished	Aug 3, 2021
<a href="#">CL.RBI.10658</a> Test RBI 30-07-2021 1	Vessel API 581 3rd r2	Unpublished	Jul 29, 2021
<a href="#">CL.RBI.10652</a> A-345	Vessel API 581 3rd r2	Unpublished	Jul 27, 2021
<a href="#">CL.RBI.10649</a> Mass Run	Vessel API 581 3rd r2	Unpublished	Jul 26, 2021
<b>More</b>			
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ASSET INSPECTION

**History**

Template

Assessment	Template Type	Analysis Status	Created On
<a href="#">CL.RBI.10716</a> Test	API 510 External for Vessels	Unpublished	Aug 17, 2021
<a href="#">CL.RBI.10715</a> Example	API 510 External for Vessels	Unpublished	Aug 17, 2021
<a href="#">CL.RBI.10711</a>	Fixed Equipment External	Unpublished	Aug 16, 2021

Test RBI 0508 1

CL.RBI.10685

Edit Header Save Calculate ▾ Publish Delete Report ▾

Template Type: Vessel API 581 3rd r2 Equipment: **A-345** Hexane Flush Location: **CATALYST SYSTEM** System: Hydrocarbon Drains Analysis Status: **Unpublished** Updated On: Aug 15, 2021 General Selection: 12/13 Currency: USD  
 CATALYST SYSTEM Description



ANALYSIS DETAILS ▾ RISK MATRIX MAINTENANCE & SERVICE ▾

General

Inputs

Display History Map Findings

Component Type:*	<input type="text" value="PUMP2S"/>	Material Code:*	<input type="text" value="ASME VIII - Div 1"/>	Corrosion Allowance:*	<input type="text" value="3.175"/> Millimeter
Geometry Type:*	<input type="text" value="Cylinder"/>	Material Code Year:*	<input type="text" value="1999"/> Years	Structural tmin:*	<input type="text" value="2.99999"/> Millimeter
Design Pressure:*	<input type="text" value="15"/> Bar	Material Spec.:	<input type="text" value="SA105"/>	Equipment Design or Fabrication Factor.:	<input type="text" value="No"/>
Design Temperature:*	<input type="text" value="59"/> Degrees Celsius	Material Grade.:	<input type="text" value="..."/>	Interface Factor.:	<input type="text" value="No"/>
Operating Pressure:*	<input type="text" value="0"/> Bar	Weld Joint Efficiency.:	<input type="text" value="1"/>	Data Reliability.:	<input type="text" value="Low Reliability Data"/>
Operating Temperature:*	<input type="text" value="42"/> Degrees Celsius	Yield Strength Override:	<input type="text" value="2061"/> Bar	RBI Date.:	<input type="text" value="July 5, 2021"/>
Length.:	<input type="text" value="9.144"/> Meter	Tensile Strength Override:	<input type="text" value="3785"/> Bar	Plan Date.:	<input type="text" value="July 5, 2031"/>
Diameter.:	<input type="text" value="2479.675"/> Millimeter	Allowable Stress Override:	<input type="text" value="923"/> Bar		

Outputs

Yield Strength: 2061 Bar Tensile Strength: 3785 Bar Allowable Stress: 923 Bar

Planning

Inputs

Display History Map Findings

Test RBI 0508 1

CL.RBI.10685

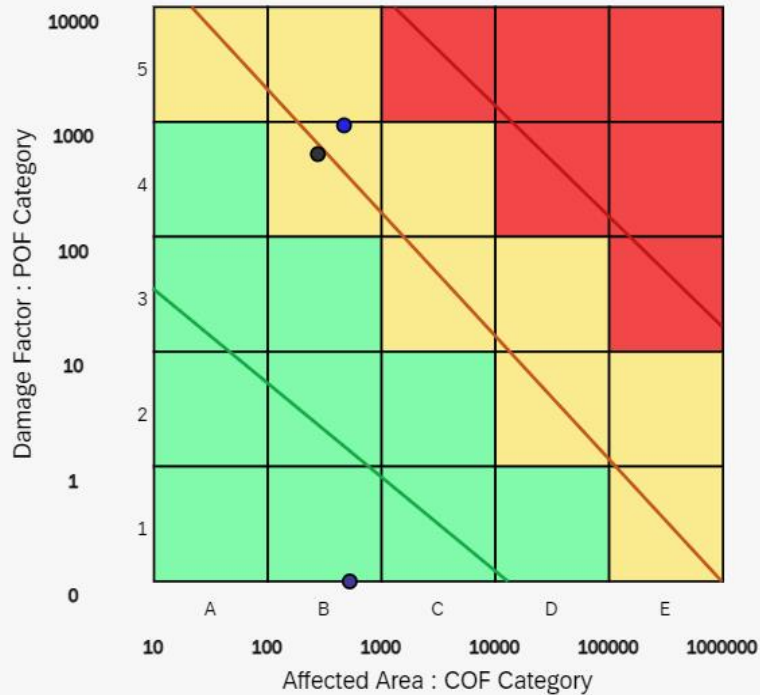
Edit Header Save Calculate Publish Delete Report

Template Type: Vessel API 581 3rd r2 Equipment: **A-345**  
Hexane Flush

Location: **CATALYST SYSTEM**  
CATALYST SYSTEM Description

System: Hydrocarbon Drains Analysis Status: **Unpublished** Updated On: Aug 15, 2021 General Selection: 12/13 Currency: USD

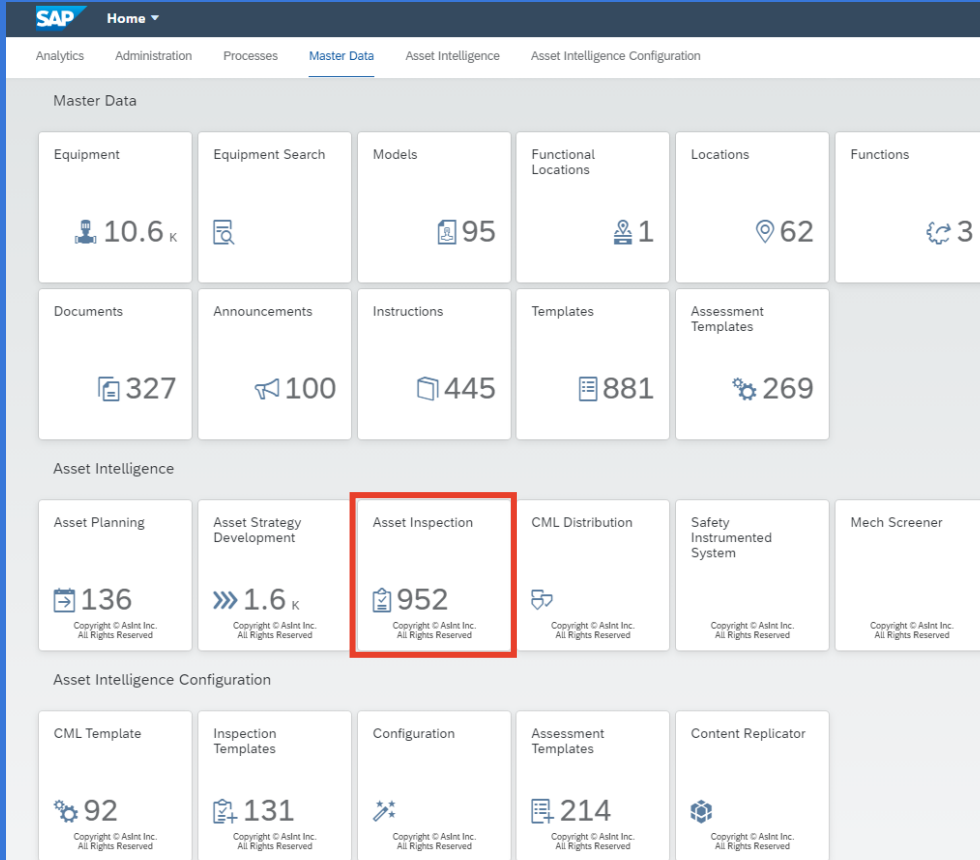
ANALYSIS DETAILS RISK MATRIX MAINTENANCE & SERVICE



- Damage Factor  
RBI Date = **496.65**  
Plan Date = **754.03**
- Thinning Damage Factor  
Plan Date = **754.03**  
Component Damage (hole) Cost = **0**
- Cracking Damage Factor  
RBI Date = **710.04**  
Plan Date = **976.61**

# Inspection Database Management System (IDMS)

Industry accepted Inspection management App embedded within SAP Asset Strategy and Performance Management (ASPM) solution.



The screenshot shows the SAP IDMS dashboard. The top navigation bar includes 'SAP Home' and menu items: 'Analytics', 'Administration', 'Processes', 'Master Data', 'Asset Intelligence', and 'Asset Intelligence Configuration'. The 'Master Data' section contains a grid of 10 cards: Equipment (10.6k), Equipment Search, Models (95), Functional Locations (1), Locations (62), Functions (3), Documents (327), Announcements (100), Instructions (445), Templates (881), and Assessment Templates (269). The 'Asset Intelligence' section contains a grid of 6 cards: Asset Planning (136), Asset Strategy Development (1.6k), Asset Inspection (952, highlighted with a red border), CML Distribution, Safety Instrumented System, and Mech Screener. The 'Asset Intelligence Configuration' section contains 5 cards: CML Template (92), Inspection Templates (131), Configuration, Assessment Templates (214), and Content Replicator.

## EXTENSION OF AIN AND ASPM

Extends existing ASPM functionality to standards on how to inspect the physical asset such as:

- ✓ API 510 (Pressure Vessel Inspection)
- ✓ API 570 (Pipe Inspection)
- ✓ API 653 (Storage Tank Inspection)
- ✓ Other Global Standards

## SAP MASTER DATA DRIVEN

No duplication of data. Process driven from SAP Master Data Templates

## LOCATION, INSPECTION, AND ANALYSIS SUMMARY

Quick access to Condition Monitoring Locations. Access to Inspections, including Thickness Data and Analysis of Thickness Data

## THICKNESS ANALYSIS AND LOCATION MANAGEMENT

Short Term and Long-Term Corrosion Rates comparison. Remaining and Half Life Trending Preform Tmin (Thickness Minimum) and MAWP (Maximum Allowable Working Pressure) calculation. History Reading & Photos

Location: CATALYST SYSTEM External IDs Status: In Revision Languages: EN,DE



INFORMATION ▾ STRUCTURE & PARTS ▾ DOCUMENTATION ▾ MONITORING ▾ MAINTENANCE & SERVICE ▾ ASSESSMENT ▾ TIMELINE ASSET INTELLIGENCE ▾ **CML** OVERALL READING

Search  +

H-001-Top Head

Save Calculate

Background information o fthe CML Cylindrical shells Outside Radius(PR/SE+0.4P) Structural T-Min History

CMLs(25)	
<b>H-001-Top Head</b>	
UT Shell	
<b>H-002-Top Head</b>	
UT Shell	
<b>H-003-Top Head</b>	
UT Shell	
<b>H-004-Bottom Head</b>	
UT Shell	
<b>H-005-Bottom Head</b>	
UT Shell	
<b>H-006-Bottom Head</b>	
UT Shell	
<b>N-001-Nozzle Bottom</b>	
UT Shell	
<b>N-002-Nozzle Top</b>	
UT Shell	
<b>N-003-Nozzle Bottom</b>	
UT Shell	
<b>N-004-Nozzle Top</b>	
UT Shell	
<b>N-005-Nozzle Bottom</b>	
UT Shell	
<b>N-006-Nozzle Top</b>	
UT Shell	
<b>N-007-Nozzle Bottom</b>	
UT Shell	

Background

Active:  YES

Description:

Geometry:

Access Required:  NO

Insulation Type:

Tmin (User Defined):  Millimeter

Code Year:  Years

Construction Code:

Material Spec:

Material Grade:

Nominal Thickness:  Millimeter

Outside Diameter:  Millimeter

Joint Efficiency:

Comment:

Date In Service:  📅

Selected T-Min [1: Calculated (Pressure) , 2: Structural , 3: User Defined]:\*

Structural T-Min:  Millimeter

# Test

CL.RBI.10716

Template Type: API 510 External for Vessels

Equipment: **A-345**  
Hexane Flush

Location: **CATALYST SYSTEM**  
CATALYST SYSTEM Description

System: Hydrocarbon Drains

Analysis Status: **Unpublished**

Updated On: Aug 17, 2021

Inspection Date: Aug 18, 2021

Component: 1



INFORMATION **CHECKLIST** CML PHOTOS MAINTENANCE AND SERVICE

Edit

Category and Name		
Supports	Condition	Findings
Support Shoes		
Supports		
Insulation	Findings	Condition
Penetrations		
Insulation	Condition	Findings
Coating/Painting		
Connections	Findings	Condition
Threaded Connections		



Fixed Equipment

IDMS\_FIXED\_EQUIPMENT



**Publish**

Location: [ATMOSPHERE\\_LOCATION](#)

[External IDs](#)

Status: [Unpublished](#)

Languages: [EN](#)



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- [CML](#)
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UT Cylindrical Shell ID Div 1 ▾

		Jul 2020	Jul 2015	Dec 2010	Jul 2005	Jul 2000
<b>H-001</b>						
Top Head	Reading (Millimeter)	8.001	8.0772	19.5072	8.1534	8.172
	Tmin (Millimeter)	3.556	3.556	3.556	3.556	3.556
	Short Term Corrosion Rate (Millimeter)	0.0152	2.8575	-2.2708	0.0025	0
	Long Term Corrosion Rate (Millimeter)	0.0076	0.0051	-0.6299	0.0025	0
	Remaining Life (Years)	50	1	0	50	50
	Half Life (Years)	25	0	0	25	25
	Retirement Date	Jul 14, 2045	Apr 14, 2016	Dec 14, 2010	Jul 14, 2030	Jul 14, 2005
<b>H-002</b>						
Top Head	Reading (Millimeter)	19.304	19.431	19.5072	8.128	8.128
	Tmin (Millimeter)	3.556	3.556	3.556	3.556	3.556
	Short Term Corrosion Rate (Millimeter)	0.0254	0.0203	-2.2758	0	0.0025

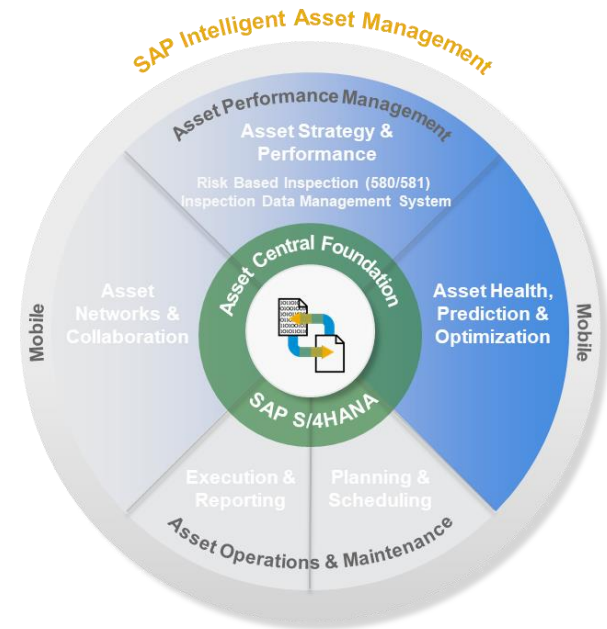
[More](#)

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# Ideo & AsInt solution

- Use the SAP Intelligent Asset management portfolio for Maintenance and Field Service in order to:
  - Increases Asset Performance
  - Reduce Maintenance costs
  - Delivers Service Excellence
- The Asset Performance Management part contains the Asset Strategy & Performance Management (ASPM) module. Use SAP ASPM to:
  - Assess the risk and criticality of assets
  - Determine the appropriate maintenance strategy
- The Risk Based Inspections part contains the RBI, IDMS module. Use RBI/IDMS to:
  - Remove multiple asset registries
  - Connecting the dots for tactical and strategic decisions
  - Removing data silos and disconnected work processes





Fast



Scalable



Simple

**ideo**

**20** jaar



Fixed cost



Low risk

# Invitation

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Sign up for the  
Idea Solution Package



## Ideo B.V.

Europalaan 30

5232 BC

's-Hertogenbosch, The Netherlands

info@ideo-nl.com

www.ideo-nl.com

### Johan Amsing

Solution architect Ideo

Johan.Amsing@ideo-nl.com

+31 (0)6 5881 0202



### Rohan Patel

CEO AsInt

Rohan.patel@asint.net

+1 713-553-8971



**<ideo** Verbeter uw service- en onderhoudsprocessen **/>**

[www.ideo-nl.com](http://www.ideo-nl.com)



VERBINDT. VERSTERKT.

FOCUS  
ONLINE

8 T/M 12 NOVEMBER 2021

# Bedankt voor je deelname

Bekijk op [www.VNSGFocusOnline.nl](http://www.VNSGFocusOnline.nl) welke sessies er nog meer zijn!

